

Appendix E

GLOSSARY OF TERMS

Acute Health Effect [Glossary]¹: A health effect that occurs over a relatively short period of time (e.g., minutes or hours). The term is used to describe brief exposures and effects which appear promptly after exposure.

Adverse Health Effect [Glossary]: A health effect from exposure to air contaminants that may range from relatively mild temporary conditions, such as eye or throat irritation, shortness of breath, or headaches to permanent and serious conditions, such as birth defects, cancer or damage to lungs, nerves, liver, heart, or other organs.

Air Dispersion Model/Air Quality Simulation Model [Glossary]: A mathematical relationship between emissions and air quality which simulates on a computer the transport, dispersion, and transformation of compounds emitted into the air.

Air Pollutants [Glossary]: Amounts of foreign and/or natural substances occurring in the atmosphere that may result in adverse effects to humans, animals, vegetation, and/or materials.

Air Pollution Control District [Glossary]: A county agency with authority to regulate stationary, indirect, and area sources of air pollution (e.g., power plants, highway construction, and housing developments) within a given county, and governed by a district air pollution control board composed of the elected county supervisors.

Air Quality Management District [Glossary]: A group of counties or portions of counties, or an individual county specified in law with authority to regulate stationary, indirect, and area sources of air pollution within the region and governed by a regional air pollution control board comprised mostly of elected officials from within the region.

Alternative Fuel [13 CCR §2421(a)(1)]: Any fuel that will reduce non-methane hydrocarbons (on a reactivity-adjusted basis), NO_x, CO, and the potential risk associated with toxic air contaminants as compared to gasoline or diesel fuel and would not result in increased deterioration of the engine. Alternate fuels include, but are not limited to, methanol, ethanol, liquefied petroleum gas, compressed natural gas, and electricity.

Ambient Air [Glossary]: The air occurring at a particular time and place outside of structures. Often used interchangeably with "outdoor air."

Aromatic Content: Percent aromatic hydrocarbons present in fuels. Aromatic hydrocarbons are organic compounds containing one or more benzene rings.

California Environmental Quality Act (CEQA) [CEQA Handbook]²: A state law intended to protect the environment of California. It is codified in sections 21000 through 21177 of the Public Resources Code.

¹ From the Air Resources Board's *Glossary for Air Pollution Terms*, available online at <http://www.arb.ca.gov/html/gloss.htm>.

Catalyst [Glossary]: A motor vehicle pollution control device designed to reduce emissions such as oxides of nitrogen, hydrocarbons, and carbon monoxide.

Children With Exceptional Needs [based upon Education Code §56026]: Children meeting eligibility criteria described in Education Code section 56026. Section 56026 of the Education code specifically defines "individuals with exceptional needs" as those persons who satisfy all the following:

- (a) Identified by an individualized education program team as a child with a disability, as that phrase is defined in subparagraph (A) of paragraph (3) of section 1401 of title 20 of the United States Code.
- (b) Their impairment, as described by subdivision (a), requires instruction, services, or both, which cannot be provided with modification of the regular school program.
- (c) Come within one of the following age categories:
 - (1) Younger than three years of age and identified by the district, the special education local plan area, or the county office as requiring intensive special education and services, as defined by the State Board of Education.
 - (2) Between the ages of three to five years, inclusive, and identified by the district, the special education local plan area, or the county office pursuant to section 56441.11.
 - (3) Between the ages of five and 18 years, inclusive.
 - (4) Between the ages of 19 and 21 years, inclusive; enrolled in or eligible for a program under this part or other special education program prior to his or her 19th birthday; and has not yet completed his or her prescribed course of study or who has not met proficiency standards or has not graduated from high school with a regular high school diploma.
 - (A) Any person who becomes 22 years of age during the months of January to June, inclusive, while participating in a program under this part may continue his or her participation in the program for the remainder of the current fiscal year, including any extended school year program for individuals with exceptional needs established pursuant to regulations adopted by the State Board of Education, pursuant to article 1 (commencing with section 56100) of chapter 2.
 - (B) Any person otherwise eligible to participate in a program under this part shall not be allowed to begin a new fiscal year in a program if he or she becomes 22 years of age in July, August, or September of that new fiscal year. However, if a person is in a year-round school program and is completing his or her individualized education program in a term that extends into the new fiscal year, then the person may complete that term.
 - (C) Any person who becomes 22 years of age during the months of October, November, or December while participating in a program under this act shall be terminated from the program on December 31 of the current fiscal year, unless the person would otherwise complete his or her individualized education program at the end of the current fiscal year.

² From the Air Resources Board's *CEQA Review Handbook for Local Air Pollution Control Agencies*, March 1990.

- (D) No school district, special education local plan area, or county office of education may develop an individualized education program that extends these eligibility dates, and in no event may a pupil be required or allowed to attend school under the provisions of this part beyond these eligibility dates solely on the basis that the individual has not met his or her goals or objectives.
- (d) Meet eligibility criteria set forth in regulations adopted by the board, including, but not limited to, those adopted pursuant to article 2.5 (commencing with section 56333) of Chapter 4.
- (e) Unless disabled within the meaning of subdivisions (a) to (d), inclusive, pupils whose educational needs are due primarily to limited English proficiency; a lack of instruction in reading or mathematics; temporary physical disabilities; social maladjustment; or environmental, cultural, or economic factors are not individuals with exceptional needs.

Criteria Pollutant [Glossary]: An air pollutant for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set. Examples include: ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and PM10 and PM2.5. The term “criteria air pollutants” derives from the requirement that the U.S. EPA must describe the characteristics and potential health and welfare effects of these pollutants. The U.S. EPA and ARB periodically review new scientific data and may propose revisions to the standards as a result.

Diesel Exhaust Particulate Matter (diesel PM) [Diesel Risk Reduction Plan]³: That portion of the exhaust from a diesel fueled compression ignition engine which is collected via a particulate matter sampling method. Diesel PM consists of several constituents, including: an elemental carbon fraction, a soluble organic fraction, and a sulfate fraction. The majority of diesel PM (i.e., 98%) is smaller than 10 microns in diameter.

Diesel Particulate Filter (DPF) [Diesel Risk Reduction Plan]: An exhaust treatment device that reduces diesel particulate matter through filtration. DPFs must be periodically “regenerated” to remove the collected particulate matter. DPFs can incorporate passive regeneration techniques, such as the catalyzed particulate filter, or they can incorporate active regeneration techniques, such as the electrically regenerated particulate filter. Typical diesel PM control efficiencies range from 62% to 97%.

Diurnal Loss [EMFAC2000 Report]⁴: Evaporative hydrocarbon emissions that occur when rising ambient temperatures cause fuel evaporation from vehicles sitting throughout the day.

³ From the Air Resources Board's *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*, October 2000.

⁴ From the Air Resources Board's staff report, *Public Meeting to Consider Approval of Revisions to the State's On-Road Motor Vehicle Emissions Inventory*, May 2000.

Driver [based upon VC §305]: Any person who drives or is in actual physical control of a vehicle.

Emergency: A sudden, urgent, usually unforeseen, occurrence; or a foreseeable occurrence relative to a passenger's pre-disclosed medical or physiological condition.

Environmental Impact Report (EIR) [CEQA Handbook]: An informational document used to inform public agency decision-makers and the public of the significant effects of a project. The EIR also identifies the possible ways to eliminate or minimize the significant effects and describes reasonable alternatives to the project.

Environmental Justice [Glossary]: The fair treatment of people of all races and incomes with respect to development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment implies that no person or group of people should shoulder a disproportionate share of negative environmental and economic impacts resulting from the execution of environmental programs.

Exposure [Glossary]: The concentration of the pollutant in the air multiplied by the population exposed to that concentration over a specified time period.

General Public Paratransit Vehicle [based upon VC §336]: Any motor vehicle defined in section 336 of the Vehicle Code that is transporting school pupils at or below the 12th-grade level to or from public or private schools or public or private school activities, except a vehicle that is a zero emission general public paratransit vehicle. Section 336 of the Vehicle Code specifically defines a "general public paratransit vehicle" as any motor vehicle designed for carrying no more than 24 persons and the driver, that provides local transportation to the general public, including transportation of pupils at or below the 12th-grade level to or from a public or private school or school activity, under the exclusive jurisdiction of a publicly owned and operated transit system through one of the following modes: dial-a-ride, subscription service, or route-deviated bus service. Vehicles used in the exclusive transportation of disabled persons as defined in section 99206.5 of the Public Utilities Code, or of persons 55 years of age or older, including any persons necessary to provide assistance to these passengers, are not general public paratransit vehicles. However, transportation of attendants, companions, or both traveling together with those individuals with disabilities who are determined to be eligible for complementary paratransit services in accordance with Title II of the Americans with Disabilities Act of 1990 (Public Law 101-336) and federal regulations adopted pursuant thereto, shall not be sufficient to qualify a vehicle as a general public paratransit vehicle. A vehicle that provides local transportation for the general public through one of the following modes: dial-a-ride, subscription service, or route-deviated bus service, but does not provide transportation of pupils at or below the 12th-grade level to or from a public or private school or school activity, is a transit bus, as defined by section 642, and is not a general public paratransit vehicle.

Gross Vehicle Weight Rating [based upon VC §350]: The weight specified by the manufacturer as the loaded weight of a single vehicle.

Health Risk Assessment [Glossary]: A document that identifies the risks and quantities of possible adverse health effects that may result from exposure to emissions of toxic air contaminants. A health risk assessment cannot predict specific health effects; it only describes the increased possibility of adverse health effects based on the best scientific information available.

Heavy-duty Vehicle [13 CCR §1900(b)(6)]: Any motor vehicle having a manufacturer's gross vehicle weight rating greater than 6,000 pounds, except passenger cars.

Hot Soak Evaporative Emissions [EMFAC2000 Report]: Evaporative hydrocarbon emissions that occur immediately after a vehicle is turned off, due principally to high under-hood temperatures.

Hybrid Electric Bus or Vehicle: Any school bus, transit bus, school pupil activity bus, youth bus, general public paratransit vehicle, or other heavy-duty vehicle equipped with at least two sources of motive energy on board:

- (A) an electric drive motor that must be used to partially or fully drive the bus or vehicle wheels; and
- (B) one of the following:
 - (i) an internal combustion engine;
 - (ii) a turbine; or
 - (iii) a fuel cell.

Idling: The engine is running while the bus or vehicle is stationary.

Motor Carrier or Carrier [based upon 13 CCR §1201(q)]: The registered owner, lessee, licensee, school district superintendent, or bailee of any school bus, transit bus, school pupil activity bus, youth bus, general public paratransit vehicle, or other heavy-duty vehicle who operates or directs the operations of any such vehicle on either a for-hire or not-for-hire basis.

Motor Vehicle [VC §415]: A vehicle that is self-propelled. "Motor vehicle" does not include a self-propelled wheelchair, invalid tricycle, or motorized quadricycle when operated by a person who, by reason of physical disability, is otherwise unable to move about as a pedestrian.

Negative Declaration [PRC §21064]: A written statement briefly describing the reasons that a proposed project will not have a significant effect on the environment and does not require the preparation of an environmental impact report.

Official Traffic Control Device [VC §440]: Any sign, signal, marking, or device, consistent with section 21400 of the Vehicle Code, placed or erected by authority of a public body or official having jurisdiction, for the purpose of regulating, warning, or guiding traffic, but does not include islands, curbs, traffic barriers, speed humps, speed bumps, or other roadway design features.

Official Traffic Control Signal [VC §445]: Any device, whether manually, electrically, or mechanically operated, by which traffic is alternately directed to stop and proceed and which is erected by authority of a public body or official having jurisdiction.

Opacity [Glossary]: The amount of light obscured by particle pollution in the atmosphere. Opacity is used as an indicator of changes in performance of particulate control systems.

Reid Vapor Pressure [Glossary]: Refers to the vapor pressure of the fuel expressed in the nearest hundredth of a pound per square inch (psi) with a higher number reflecting more gasoline evaporation.

Resting Loss [EMFAC2000 Report]: Evaporative hydrocarbon emissions that occur when a vehicle is sitting and are caused by permeation through rubber and plastic components.

Ringelmann Chart [Glossary]: A series of charts, numbered 0 to 5, that simulate various smoke densities by presenting different percentages of black. A Ringelmann No. 1 is equivalent to 20 percent black; a Ringelmann No. 5 is 100 percent black. They are used for measuring the opacity or equivalent obscuration of smoke arising from stacks and other sources by matching the actual effluent with the various numbers, or densities, indicated by the charts.

Running Emissions [based upon EMFAC2000 Report]: Emissions such as hydrocarbons, particulate matter, carbon monoxide, and oxides of nitrogen that emanate from a vehicle's tailpipe, primarily due to incomplete fuel combustion.

Running Loss [EMFAC2000 Report]: Evaporative hydrocarbon emissions that occur due to fuel heating and are emitted while the vehicle is being operated.

Rural Area [U.S. Census 2000]: The U.S. Census Bureau's classification of "rural" consists of all territory, population, and housing units located outside of urbanized areas and urban clusters. The rural component contains both place and nonplace territory. Geographic entities, such as census tracts, counties, metropolitan areas, and the territory outside metropolitan areas, often are "split" between urban and rural territory, and the population and housing units they contain often are partly classified as urban and partly classified as rural. (See also definition of "Urban Area")

School [based upon HSC §42301.9 and Education Code §17609(e)]: Any public or private school used for purposes of the education of more than 12 school pupils at or below the 12th grade level, but does not include any private school in which education is primarily conducted in private homes. The term includes any building or structure, playground, athletic field, or other area of school property.

School Bus [based upon VC §545]: Any school bus defined in section 545 of the Vehicle Code, except a zero emission school bus. Section 545 of the Vehicle Code specifically defines a “schoolbus” as any motor vehicle designed, used, or maintained for the transportation of any school pupil at or below the 12th-grade level to or from a public or private school or to or from public or private school activities, except the following:

- (a) A motor vehicle of any type carrying only members of the household of the owner thereof.
- (b) A motortruck transporting pupils who are seated only in the passenger compartment, or a passenger vehicle designed for and carrying not more than 10 persons, including the driver, unless the vehicle or truck is transporting two or more handicapped pupils confined to wheelchairs.
- (c) A motor vehicle operated by a common carrier, or by and under the exclusive jurisdiction of a publicly owned or operated transit system, only during the time it is on a scheduled run and is available to the general public, or on a run scheduled in response to a request from a handicapped pupil confined to a wheelchair, or from a parent of the handicapped pupil, for transportation to or from nonschool activities; provided, that the motor vehicle is designed for and actually carries not more than 16 persons including the driver, is available to eligible persons of the general public, and the school does not provide the requested transportation service.
- (d) A school pupil activity bus.
- (e) A motor vehicle operated by a carrier licensed by the Interstate Commerce Commission which is transporting pupils on a school activity entering or returning to the state from another state or country.
- (f) A youth bus.
- (g) Notwithstanding any other provisions of this section, the governing board of a district maintaining a community college may, by resolution, designate any motor vehicle operated by or for the district, a schoolbus within the meaning of this section, if it is primarily used for the transportation of community college students to or from a public community college or to or from public community college activities. The designation shall not be effective until written notification thereof has been filed with the Department of the California Highway Patrol.
- (h) A state-owned motor vehicle being operated by a state employee upon the driveways, paths, parking facilities, or grounds specified in section 21113 that are under the control of a state hospital under the jurisdiction of the State Department of Developmental Services where the posted speed limit is not more than 20 miles per hour. The motor vehicle may also be operated for a distance of not more than one-quarter mile upon a public street or highway that runs through the grounds of a state hospital under the jurisdiction of the State Department of Developmental Services, if the posted speed limit on the public street or highway is not more than 25 miles per hour and if all traffic is regulated by posted stop signs or official traffic control signals at the points of entry and exit by the motor vehicle.
- (i) A general public paratransit vehicle as defined in section 336, provided that the general public paratransit vehicle does not duplicate existing schoolbus service, does not transport a public school pupil at or below the 12th-grade level to a destination outside of that pupil's school district, and is not used to transport public school pupils in areas where schoolbus services were available during the 1986-87

school year. In areas where expanded school services require expanded transportation of public school pupils, as determined by the governing board of a school district, general public paratransit vehicles shall not be used to transport those pupils for a period of three years from the date that a need for expansion is identified. For purposes of this section, a pupil is defined as a student at or below the 12th-grade level who is being transported to a mandated school activity.

- (j) A schoolbus with the flashing red light signal system, the amber warning system, and the schoolbus signs covered, while being used for transportation of persons other than pupils, to or from school or school related activities.

School Pupil Activity Bus [based upon VC §546]: Any bus defined in section 546 of the Vehicle Code, except a zero emission school pupil activity bus. Section 546 of the Vehicle Code specifically defines a "school pupil activity bus" as any motor vehicle, other than a schoolbus, operated by a common carrier, or by and under the exclusive jurisdiction of a publicly owned or operated transit system, or by a passenger charter-party carrier, used under a contractual agreement between a school and carrier to transport school pupils at or below the 12th-grade level to or from a public or private school activity, or used to transport pupils to or from residential schools, when the pupils are received and discharged at off-highway locations where a parent or adult designated by the parent is present to accept the pupil or place the pupil on the bus. As used in this section, common carrier, publicly owned or operated transit system, and passenger charter-party carrier refer to carriers in business for the principal purpose of transporting members of the public on a commercial basis. This section shall not apply to a motor vehicle operated by a carrier licensed by the Interstate Commerce Commission that is transporting pupils on a school activity trip entering or returning to the state from another state or country. The driver of a school pupil activity bus shall be subject to the regulations adopted by the California Highway Patrol governing schoolbus drivers, except that the regulations shall not require drivers to duplicate training or schooling that they have otherwise received which is equivalent to that required pursuant to the regulations, and the regulations shall not require drivers to take training in first aid. However, a valid certificate to drive a school pupil activity bus shall not entitle the bearer to drive a schoolbus.

Scientific Review Panel [Glossary]: Mandated by AB 1807, this nine-member panel advises the ARB, OEHHA, and the California Department of Pesticide Regulation on the scientific adequacy of the risk assessment portion of reports issued by those three agencies in the process of identifying substances as toxic air contaminants.

Toxic Air Contaminant [HSC §39655]: An air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of section 112 of the federal act (42 U.S.C. Sec. 7412(b)) is a toxic air contaminant. A toxic air contaminant which is a pesticide shall be regulated in its pesticidal use by the Department of Pesticide Regulation pursuant to Article 1.5 (commencing with section 14021) of Chapter 3 of Division 7 of the Food and Agricultural Code.

Transit Bus [based upon VC §642]: Any bus defined in section 642 of the Vehicle Code, except a zero emission transit bus. Section 642 of the Vehicle Code specifically defines a “transit bus” as any bus owned or operated by a publicly owned or operated transit system, or operated under contract with a publicly owned or operated transit system, and used to provide to the general public, regularly scheduled transportation for which a fare is charged. A general public paratransit vehicle is not a transit bus.

Type 1 Bus [13 CCR §1201(b)(1)]: Every motor vehicle defined in Vehicle Code section 233 and every school bus, school pupil activity bus, youth bus, and farm labor bus designed for carrying more than 16 passengers and the driver.

Type 2 Bus [13 CCR §1201(b)(2)]: Every motor vehicle defined in Vehicle Code section 233 and every school bus, school pupil activity bus, youth bus, and farm labor bus designed for carrying not more than 16 passengers and the driver; or manufactured on or after April 1, 1977, having a manufacturer's gross vehicle weight rating of 10,000 pounds or less, and designed for carrying not more than 20 passengers and the driver.

Unit Risk Factor [Glossary]: The number of potential excess cancer cases from a lifetime exposure to one microgram per cubic meter (μ/m^3) of a given substance. For example, a unit risk value of 5.5×10^{-6} would indicate an estimated 5.5 cancer cases per million people exposed to an average concentration of $1 \mu/\text{m}^3$ of a specific carcinogen for 70 years.

Urban Area [U.S. Census 2000]: For Census 2000, the U.S. Census Bureau classifies as "urban" all territory, population, and housing units located within an urbanized area (UA) or an urban cluster (UC). It delineates UA and UC boundaries to encompass densely settled territory, which consists of: (a) core census block groups or blocks that have a population density of at least 1,000 people per square mile and (b) surrounding census blocks that have an overall density of at least 500 people per square mile. In addition, under certain conditions, less densely settled territory may be part of each UA or UC.

Urban Bus [Staff Report for New Urban Buses]⁵: Current California regulations, by reference to the Code of Federal Regulations (CFR), section 86.091-2, define an urban bus as a heavy heavy-duty diesel-powered passenger-carrying vehicle (+33,000 pounds GVW) with a load capacity of 15 or more passengers intended primarily for intra-city operation, i.e., within the confines of a city or greater metropolitan area. Urban bus operation is characterized by short rides and frequent stops. To facilitate this type of operation, more than one set of quick-operating entrance and exit doors are normally present. Since fares are usually paid in cash or tokens, rather than purchased in advance in the form of tickets, urban buses normally have equipment installed for collection of fares. Urban buses are also typically characterized by the absence of

⁵ From the Air Resources Board's *Staff Report: Proposed Regulation for a Public Transit Bus Fleet Rule and Emission Standards for New Urban Buses*, December 10, 1999.

equipment and facilities for long distance travel, e.g., rest rooms, large luggage compartments, and facilities for stowing carry-on luggage.

Warm Start Emissions: Engine exhaust emissions occurring upon restart when the engine temperature has not significantly dropped below optimal operating temperature.

Youth Bus [based upon VC §680]: Any bus defined in section 680 of the Vehicle Code, except a zero emission youth bus. Section 680 of the Vehicle Code specifically defines a “youth bus” as

- (a) Any bus, other than a schoolbus, designed for and when actually carrying not more than 16 persons and the driver, used to transport children at or below the 12th-grade level directly from a public or private school to an organized nonschool-related youth activity within 25 miles of the school or directly from a location which provides the organized nonschool-related youth activity to a public or private school within 25 miles of that location.
- (b) In addition to the destinations specified in subdivision (a), a youth bus may also be used to transport children at or below the 12th-grade level to or from their place of residence if the driver has met the requirements of section 12523 and received additional instruction and training approved by the Department of the California Highway Patrol.

Zero Emission School Bus, Transit Bus, School Pupil Activity Bus, Youth Bus, General Public Paratransit Vehicle, or Other Heavy-Duty Vehicle [based upon 13 CCR § 1962 (a)]: Any bus or vehicle certified to zero-emission standards.